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DRAFT

September 16, 2013

Mr. Ken Rose, PE, PG
Director of Engineering & Environmental Services
Illinois Railway, LLC
252 Clayton Street, 3rd Floor
Denver, CO 80206

Subject: Phase II Environmental Site Assessment Scope of Work
Wedron, IL

Dear Mr. Rose:

CDM Smith Inc. (CDM Smith) is pleased to submit this scope of work (SOW) to Illinois Railway, LLC (IR) to conduct an additional subsurface investigation on the railroad right-of-way located in Wedron, Illinois.

Project Background

The subject property is a railroad easement located on the east side of Wedron, Illinois along County Highway 11. CDM Smith understands that the proposed activities will be scheduled for Fall 2013. GZA GeoEnvironmental, Inc. (GZA) completed a Shallow Subsurface Investigation in June 2012. In addition, multiple investigations have been completed west of the easement by the USEPA which identified a benzene plume west of the subject property. CDM Smith completed a Phase II ESA in September 2012. In April 2013, a previously unknown UST was removed along with oversight by the U.S. Environmental Protection Agency (USEPA).

Currently, IR is in negotiations with the United States Environmental Protection Agency's (EPA) for a voluntary Administrative Order on Consent (AOC).

Project Approach

CDM Smith will complete all activities under direction from IR in a timely manner and in accordance with all applicable subsections of IEPA, Title 35: Environmental Protection, Subtitle G: Waste Disposal and Chapter I: Pollution Control Board, Subchapter D: Underground Injection Control and Underground Storage Tank Programs. All activities will also follow the AOC requirements. All laboratory procedures and methods will meet the minimum specified detection limits in accordance with TACO: 35 IAC Part 742 and Part 734 of Subchapter D, Petroleum Underground Storage Tanks, specifically Section 734.415 regarding Data Quality.





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Scope of Work

The CDM Smith Team will provide all staff, outside professionals, equipment and supplies to perform the following SOW:

Task 1 – Field Sampling Plan

Geophysical Survey – Review historical maps to identify locations of historical gas houses, oil houses, and pump houses along the right-of-way. CDM Smith will complete a geophysical survey of the right-of-way as defined in **Figure 1**. The survey is to be conducted over an area approximately 75' x 1,000'. This includes an anomaly identified by the EPA during their May 2013 geophysical survey. Using marking paint, pins and flagging for control, the scope of work will include the use of time-domain electromagnetics (EM-61) and flux-gate magnetometer. In addition and in response to EPA requests, CDM Smith will also survey the area using ground penetrating radar (GPR). All identified subsurface anomalies will be marked in the field using spray paint and/or flagging.

Sampling Plan - CDM Smith will review our 2012 Report of Findings, additional data collected during the UST removal, and the geophysical survey to develop a field sampling plan (FSP). Boring locations will be located based on the historical features identified in previous documentation and investigations. If an anomaly is identified from the geophysical survey, a boring will be placed adjacent to the anomaly in order to avoid accidentally penetrating any drums or tanks. Anticipated boring locations are as follows and are shown on Figure 1:

- North pump house (1 boring)
- Oil house (1 boring)
- Oil house /gas house (1 boring)
- Gas house (3 borings) – corresponds to the May 2013 EPA geophysical survey anomaly
- South pump house (1 boring)
- April 2013 LUST location (3 borings)

The soils will be screened with an UltraRAE photoionization detector (PID) or equivalent for volatile organic compounds. Additional borings will be stepped out based on PID readings greater than 5 ppm with the collection of additional samples in order to delineate potential impacts.

CDM Smith will work closely with IR and EPA to determine the placement of up to the ten (10) borings identified above and any additional step-out borings. CDM Smith will also work closely with IR and EPA and, based upon the findings from the soil investigation, prior to installation of



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three (3) permanent monitoring wells. The borings will be utilized to characterize the fill and subsurface materials and help delineate the presence or absence of gasoline-related constituents on the Site. CDM Smith will prepare a Field Sampling Quality Assurance Project Plan (QAPP) for approval by IR and EPA prior to initiating fieldwork.

Update Site Health & Safety plan – The existing site Health and Safety Plan (HASP), consistent with 29 CFR 1910, describes the methods to be employed to protect the health and safety of personnel involved in field investigation activities. The HASP will be updated as necessary in order to safeguard CDM Smith employees and others present at the site during intrusive site work.

Task 2 – Field Investigation

Utility location - Public utilities will be notified using the Illinois Joint Utility Locating Information for Excavators (JULIE) utility locating services 48 hours prior to drilling.

Phase 1 - Drill and collect samples from 10 soil borings – Following receipt and review of the geophysical survey report that presents results from Task 1 activities, CDM Smith will direct the drilling subcontractor, GSG Consultants, Inc., to advance an initial ten (10) soil borings using direct push technology, to a the water table, bedrock, or a maximum depth of 24 feet below ground surface (bgs), whichever comes first. Additional step out borings may be completed based on the screening results.

An engineer/geologist will classify soils according to the Unified Soil Classification System (USCS), note visual evidence of contamination and/or odors, and screen soils with a PID for volatile organic compounds. Soils will be classified on a continuous basis from each bore hole from the surface to the terminus of the boring.

Two (2) soil samples from each boring location will be collected for analysis. The samples will be collected based on the PID readings. If there are no elevated PID readings, then one (1) sample will be collected from 0-3 feet bgs and the other from the bottom of the boring just above the water table. If there is only a single PID reading, then one (1) sample will be collected from the soil depth associated with the PID reading and the other from the bottom of the boring just above the water table. No soil samples will be collected below the water table. Quality control samples will be collected in the field, including field duplicates, trip blanks, and matrix spike/matrix spike duplicates (MS/MSD).

The soil and groundwater samples selected for analytical testing will be placed in the appropriate containers provided by the laboratory, logged, properly labeled, placed in iced coolers, and sent to the analytical laboratory using standard chain-of-custody procedures.



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Phase 2 - Install and Develop Three (3) Permanent Monitoring Wells - CDM Smith will install three (3) monitoring wells with screen intervals in the first encountered groundwater. The well construction will consist of 2-inch diameter PVC pipe with a ten (10) foot section of 0.010-inch slotted screen placed across the water table. The wells will include flush-mounted covers and locking well caps. Each well will be surveyed to the top of the casing using the datum established by Fairmont Minerals.

CDM Smith will develop the monitoring wells using a surge and pump technique to remove silt and other fines from the screened interval and to improve the hydraulic connection between the wells and the surrounding formation.

Analytical - CDM Smith will analyze ~~twenty (20)~~ soil samples for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), total lead, and pH. Toxicity Characteristic Leaching Procedure (TCLP) lead will also be conducted, dependent on the initial findings. Additional samples collected in the field will be placed on hold pending review of the initial analytical results.

Laboratory analytical services will be provided by Test America of University Park, Illinois. Test America is accredited by the National Environmental Laboratory Accreditation Program (NELAP). Other firms may provide analytical services for specialized analysis requirements. Laboratory procedures and methods will meet the minimum specified detection limits in accordance with the IEPA TACO: 35 IAC Part 742 and/or SW-846 protocols. CDM Smith assumes samples will be analyzed under a standard (10-day) turnaround time.

Phase 3 - Sample Monitoring Wells and Collect Water Level Measurements - CDM Smith will collect one (1) round of groundwater samples from the three (3) wells installed at the site. Sampling will be conducted using ~~IEPA-approved~~ low-flow methodologies. The samples will be analyzed for VOCs, SVOCs, and total lead.

CDM Smith will also gauge depth to groundwater, and using the established datum for all Wedron groundwater investigation activities, will present calculated groundwater elevations in a table and on a figure. Groundwater elevation contours will not be interpreted and visually presented due to the linear nature of the installed wells along the railroad right of way.

Decontamination and Investigation-Derived Waste - Decontamination of the drill rig will be conducted between borings. An Alconox solution will be used on all other sampling equipment. Investigation-derived waste (IDW) such as soil cuttings, development water and decontamination water will be drummed and left onsite at a location approved by Wedron Silica.

Field Assumptions



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- CDM Smith assumes that all work will be conducted within the IR property limits; therefore, no local permits will be required.
- The field investigation plan is based on three (3), 10-hour workdays and three separate mobilizations. CDM Smith will complete as much work as possible within that time frame; however, due to weather, accessibility, and/or site conditions, it is possible that additional field time may be required to complete the work scope.
- Field personnel and drilling subcontractors will be able to access all required portions of the site. All proposed borings and monitoring well locations will be accessible to a truck-mounted drill rig. Inaccessible locations will be evaluated to determine alternative safe drilling and access options.
- CDM Smith will attempt to locate the proposed borings and monitoring wells in readily accessible areas.
- Borings and monitoring wells will be completed to a maximum depth of twenty (24) feet bgs.
- Site access will be available at all times for field activities.

EPA Access

EPA will be allowed access to the three (3) monitoring wells for future surveying and sampling purposes as needed, subject to the terms of the AOC regarding compliance with railroad operations and safety, prior notification and escort, and use of appropriate personal protective equipment.

Task 3 – Technical Memorandum

CDM Smith will prepare a technical memorandum summarizing the subsurface investigation that will include the following:

- Site Description
- Site Base Map
- Documentation of Field Activities including field procedures, sample preservation and handling methods, and boring logs
- A figure showing all boring/sampling locations and depths in relation to the site recognized environmental conditions
- A table comparing detected chemicals to proposed TACO Tier 1 remediation objectives (ROs) contained in 35 IAC Part 742
- A figure showing the locations where contaminants were detected above the ROs
- Laboratory results and reports



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- Boring logs with PID data
- Geophysical survey results

Deliverables

Three hard copies and an electronic copy in .pdf format to IR.

Project Schedule

- Task 1 – the geophysical survey will be initiated within 2 weeks of USEPA approval of the work plan. A geophysical survey report will be completed within 2 weeks after completion of fieldwork. The QAPP will be submitted and approved prior to the start of fieldwork.
- Task 2 – Phase I of the field investigation will be initiated within 2 weeks of receipt of the geophysical survey report and EPA approval of the QAPP. Phase II of the field investigation will be initiated within 2 weeks of receipt of the laboratory analyses.
- Task 3 - A draft field investigation technical memorandum will be completed within 3-4 weeks of receipt of the soil and groundwater laboratory analyses.

Please contact the undersigned with any questions or comments.

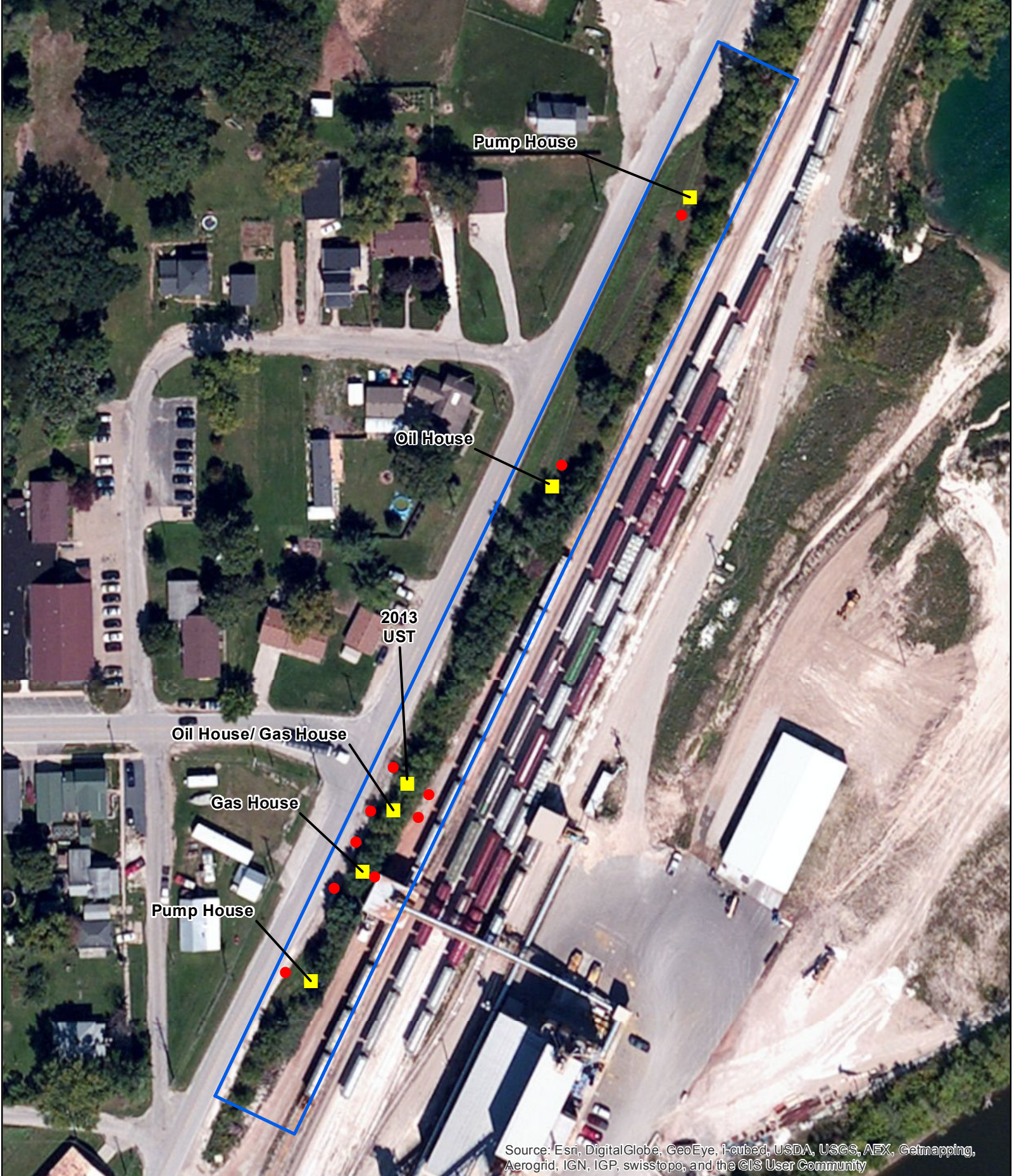
Very truly yours,

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Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Legend

- Proposed GeoProbe Sample Locations
- Structures
- ▭ Proposed Geophysical Area

0 25 50 100
Feet

Proposed Geophysical Area
and
Proposed GeoProbe Sample Locations

Wedron, IL



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Currently, IR is in negotiations with the United States Environmental Protection Agency's (EPA) for a voluntary Administrative Order on Consent (AOC).

Project Approach

CDM Smith will complete all activities under direction from IR in a timely manner and in accordance with all applicable subsections of IEPA, Title 35: Environmental Protection, Subtitle G: Waste Disposal and Chapter I: Pollution Control Board, Subchapter D: Underground Injection Control and Underground Storage Tank Programs. All activities will also follow the AOC requirements. All laboratory procedures and methods will meet the minimum specified detection limits in accordance with TACO: 35 IAC Part 742 and Part 734 of Subchapter D, Petroleum Underground Storage Tanks, specifically Section 734.415 regarding Data Quality.





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Scope of Work

The CDM Smith Team will provide all staff, outside professionals, equipment and supplies to perform the following SOW:

Task 1 – Field Sampling Plan

Geophysical Survey – Review historical maps to identify locations of historical gas houses, oil houses, and pump houses along the right-of-way, and confirm locations by overlaying historical and current maps to geo synchronize locations. CDM Smith will use the overlay map to create GPS points for all historical locations. CDM Smith, with a licensed surveyor, will complete a geophysical survey of the right-of-way as defined in **Figure 1**. The survey is to be conducted over an area approximately 75' x 1,000'. This includes an anomaly identified by the EPA during their May 2013 geophysical survey. Using marking paint, pins and flagging for control, the scope of work will include the use of time-domain electromagnetics (EM-61) and flux-gate magnetometer. In addition and in response to EPA requests, CDM Smith will also survey the area using ground penetrating radar (GPR). All identified subsurface anomalies will be marked in the field using spray paint and/or flagging.

Sampling Plan - CDM Smith will review our 2012 Report of Findings, additional data collected during the UST removal, and the geophysical survey to develop a field sampling plan (FSP). Boring locations will be located based on the historical features identified in previous documentation and investigations. If an anomaly is identified from the geophysical survey, a boring will be placed adjacent to the anomaly in order to avoid accidentally penetrating any drums or tanks. For confirmed anomalies, CDM Smith will contact the Office of State Fire Marshall and follow procedures to conduct test pits, removal, and sampling of tank contents and soils.

Anticipated boring locations are as follows and are shown on Figure 1:

- North pump house (1 boring)
- Oil house (1 boring)
- Oil house /gas house (1 boring)
- Gas house (3 borings) – corresponds to the May 2013 EPA geophysical survey anomaly
- South pump house (1 boring)
- April 2013 LUST location (3 borings)

The soils will be screened with an UltraRAE photoionization detector (PID) or equivalent for volatile organic compounds. Additional borings will be stepped out based on PID readings greater than 5 ppm with the collection of additional samples in order to delineate potential impacts.



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CDM Smith will work closely with IR and EPA to determine the placement of the ten (10) borings identified above and any additional step-out borings. CDM Smith will also work closely with IR and EPA prior to installation of three (3) permanent monitoring wells. The borings will be utilized to characterize the fill and subsurface materials and help delineate the presence or absence of gasoline-related constituents on the Site. CDM Smith will prepare a Field Sampling Quality Assurance Project Plan (QAPP) for approval by IR and EPA prior to initiating fieldwork.

Update Site Health & Safety plan – The existing site Health and Safety Plan (HASP), consistent with 29 CFR 1910, describes the methods to be employed to protect the health and safety of personnel involved in field investigation activities. The HASP will be updated as necessary in order to safeguard CDM Smith employees and others present at the site during intrusive site work.

Task 2 – Field Investigation

Utility location - Public utilities will be notified using the Illinois Joint Utility Locating Information for Excavators (JULIE) utility locating services 48 hours prior to drilling.

Phase 1 - Drill and collect samples from 10 soil borings – Following receipt and review of the geophysical survey report that presents results from Task 1 activities, CDM Smith will direct the drilling subcontractor, GSG Consultants, Inc., to advance an initial ten (10) soil borings using direct push technology, to a the water table or, bedrock, ~~or a maximum depth of 24 feet below ground surface (bgs), whichever comes first~~. Additional step out borings may be completed based on the screening results.

An engineer/geologist will classify soils according to the Unified Soil Classification System (USCS), note visual evidence of contamination and/or odors, and screen soils with a PID for volatile organic compounds. Soils will be classified on a continuous basis from each bore hole from the surface to the terminus of the boring.

Two (2) soil samples from each boring location will be collected for analysis. The samples will be collected based on the PID readings. If there are no elevated PID readings, then one (1) sample will be collected from 0-3 feet bgs and the other from the bottom of the boring just above the water table. If there is only a single PID reading, then one (1) sample will be collected from the soil depth associated with the PID reading and the other from the bottom of the boring just above the water table. No soil samples will be collected below the water table. Quality control samples will be collected in the field, including field duplicates, trip blanks, and matrix spike/matrix spike duplicates (MS/MSD).

The soil and groundwater samples selected for analytical testing will be placed in the appropriate containers provided by the laboratory, logged, properly labeled, placed in iced coolers, and sent to the analytical laboratory using standard chain-of-custody procedures.



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Phase 2 - Install and Develop Three (3) Permanent Monitoring Wells - CDM Smith will submit proposed locations of three (3) monitoring wells to EPA for approval based on Phase 1 sample results. CDM Smith will install three (3) monitoring wells with screen intervals in the first encountered groundwater. The well construction will consist of 2-inch diameter PVC pipe with a ten (10) foot section of 0.010-inch slotted screen placed across the water table. The wells will include flush-mounted covers and locking well caps. Each well will be surveyed to the top of the casing using the datum established by Fairmont Minerals.

CDM Smith will develop the monitoring wells using a surge and pump technique to remove silt and other fines from the screened interval and to improve the hydraulic connection between the wells and the surrounding formation.

Analytical – CDM Smith will analyze soil samples for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), total lead, and pH. Toxicity Characteristic Leaching Procedure (TCLP) lead will also be conducted, dependent on the initial findings. Additional samples collected in the field will be placed on hold pending review of the initial analytical results.

Laboratory analytical services will be provided by Test America of University Park, Illinois. Test America is accredited by the National Environmental Laboratory Accreditation Program (NELAP). Other firms may provide analytical services for specialized analysis requirements. Laboratory procedures and methods will meet the minimum specified detection limits in accordance with the IEPA TACO: 35 IAC Part 742 and/or SW-846 protocols. CDM Smith assumes samples will be analyzed under a standard (10-day) turnaround time.

Phase 3 - Sample Monitoring Wells and Collect Water Level Measurements - CDM Smith will collect one (1) round of groundwater samples from the three (3) wells installed at the site. Sampling will be conducted using low-flow methodologies. The samples will be analyzed for VOCs, SVOCs, and total lead.

CDM Smith will also gauge depth to groundwater, and using the established datum for all Wedron groundwater investigation activities, will present calculated groundwater elevations in a table and on a figure. Groundwater elevation contours will not be interpreted and visually presented due to the linear nature of the installed wells along the railroad right of way.

Decontamination and Investigation-Derived Waste - Decontamination of the drill rig will be conducted between borings. An Alconox solution will be used on all other sampling equipment. Investigation-derived waste (IDW) such as soil cuttings, development water and decontamination water will be drummed and left onsite at a location approved by Wedron Silica.

Field Assumptions



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- CDM Smith assumes that all work will be conducted within the IR property limits; therefore, no local permits will be required.
- The field investigation plan is based on three (3), 10-hour workdays and three separate mobilizations. CDM Smith will complete as much work as possible within that time frame; however, due to weather, accessibility, and/or site conditions, it is possible that additional field time may be required to complete the work scope.
- Field personnel and drilling subcontractors will be able to access all required portions of the site. All proposed borings and monitoring well locations will be accessible to a truck-mounted drill rig. Inaccessible locations will be evaluated to determine alternative safe drilling and access options.
- CDM Smith will attempt to locate the proposed borings and monitoring wells in readily accessible areas.
- Borings ~~and monitoring wells~~ will be completed to the water table or bedrock, and monitoring wells will be completed such that the screen straddles the water table a maximum depth of twenty (24) feet bgs.
- Site access will be available at all times for field activities.

EPA Access

EPA will be allowed access to the three (3) monitoring wells for future surveying and sampling purposes as needed, subject to the terms of the AOC regarding compliance with railroad operations and safety, prior notification and escort, and use of appropriate personal protective equipment.

Task 3 – Technical Memorandum

CDM Smith will prepare a technical memorandum summarizing the subsurface investigation that will include the following:

- Site Description
- Site Base Map
- Documentation of Field Activities including field procedures, sample preservation and handling methods, and boring logs
- A figure showing all boring/sampling locations and depths in relation to the site recognized environmental conditions
- A table comparing detected chemicals to proposed TACO Tier 1 remediation objectives (ROs) contained in 35 IAC Part 742
- A figure showing the locations where contaminants were detected above the ROs



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- Laboratory results and reports
- Boring logs with PID data
- Geophysical survey results

Deliverables

Three hard copies and an electronic copy in .pdf format to IR.

Project Schedule

- Task 1 – Create GPS points for all historical locations within one week of the effective date of the AOC. ‡The geophysical survey will be initiated within 2 weeks of USEPA approval of the work planthe effective date of the AOC. Contact with the Office of State Fire Marshall will be initiated immediately upon confirmation of an anomaly. A geophysical survey report will be completed within 2 weeks after completion of fieldwork. The QAPP will be submitted and approved within 30 days from the effective date of the AOCprior to the start of fieldworkthe geophysical survey.
- Task 2 – Phase I of the field investigation will be initiated within 2 weeks of receipt of the geophysical survey report and EPA approval of the QAPP. Phase II of the field investigation will be initiated within 2 weeks of receipt of the laboratory analyses.
- Task 3 - A draft field investigation technical memorandum will be completed within 3-4 weeks of receipt of the soil and groundwater laboratory analyses.

Please contact the undersigned with any questions or comments.

Very truly yours,

Christopher A. Albrecht
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